United States Patent [19]

Flurry

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[54]	REAL-TIME RUB-OUT ERASE FOR AN
	ELECTRONIC HANDWRITING FACILITY

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[56] References Cited

U.S. PATENT DOCUMENTS

3,559,182	1/1971	Floret et al 364/900
4,112,415	9/1978	Hilbrink 364/900 X
4,197,590	4/1980	Sukonick et al 364/900
4,317,956	3/1982	Torok et al 178/18

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[57] ABSTRACT

An electronic handwriting facility comprises a central

processing unit (10), an all points addressable display (12), and an electronic tablet (14) and stylus (16). The handwriting facility simulates writing with a pen or pencil and paper. An electronic document is generated by periodically sending to the central processing unit (10) the absolute location of the stylus (16) in relation to the tablet (14). Each point is mapped to the display coordinate system, and the points are stored in point list. The handwriting facility is provided with a real-time rub-out erase feature wherein the handwriting facility is first set to the erase mode and then the points in the point list to be erased are identified. Real-time erasure is assured by using a grid overlaying the write area to limit the number of points searched to a small percentage of the total. The grid breaks the write area into a number of grid boxes. Only the grid boxes touched by the erase cursor are searched for erasure. When a point is inside the erase cursor, it is deleted from the point list. The user is provided with a menu from which to select an erase stylus size further adding to the flexibility of the erase feature.

8 Claims, 12 Drawing Figures

